AMENDMENT UNDER 37 C.F.R. § 1.111Attorney Docket no. Q76451 U.S. Application No. 10/625,629

AMENDMENTS TO THE SPECIFICATION

2.

Please delete the present Specification.

Please add the attached Substitute Specification.

Please delete the present Abstract of the Disclosure.

Please add the following new Abstract of the Disclosure:

Interpretation systems for interpreting reflectometry information are provided with modules for making interpretations, with each module comprising a generating module-part, a testing module-part, and a debugging module-part, and with one module being a generating system-part for a next module and with said next module being a testing system-part and a debugging system-part for said one module, to introduce improved intelligence. These interpretation systems have double-level Generate-Test-Debug (GTD) structures, two at module level as well as one at system level. This improved intelligence can be further improved by introducing a third module resulting in three GTD structures at module level and two GTD structures at system level. Interpretations are pulse-based, energy-based, simulation-based for rough, medium, and precise interpretation for increasing the efficiency of the improved intelligence.

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